

REMARKS

The specification has been amended to correct the current status of the parent applications.

Claims 18 and 19 are currently pending. Claim 18 has been amended. Support for this amendment can be found in the original specification at page 2, line 25 – page 3, line 1. No new matter has been added.

Rejections Under 35 U.S.C. § 102:

The Office has rejected claim 18 under 35 U.S.C. § 102(b) as being anticipated by US 5,321,069 (Owens). More specifically, the Office asserts that Owens teaches a process of making a luminescent fiber as claimed prior to the current claim amendments.

Owens teaches a method for producing phosphorescent textile fibers, filaments, etc., from a thermoplastic polymer, such as nylon, polyester, or polypropylene. According to the method of Owens, pellets of the thermoplastic polymer are coated with a powder of phosphorescent material, fed into an extruder, and then extracted as a spun fiber. Owens specifically states that it is important to uniformly apply the pigment coating to the pellets in order to eliminate concentrations of solid particles which can adversely affect physical properties of the individual filaments. (*See* col. 4, lines 5 – 14.)

In contrast to Owens, the amended claims of the present invention are directed to a process for producing luminescent fiber from at least one fiber-forming material or solution thereof and at least one luminophor pigment, wherein the fiber-forming material or solution thereof and the pigment *are miscible*. Thus, the pigment and fiber-forming material are selected so that one may be dissolved uniformly in the other. The method of Owens, on the other hand, utilizes pigments and thermoplastic polymers that are not miscible with each other, as evidenced by the pigment's propensity to form concentrations of solid particles.

For a reference to anticipate a claim under § 102, each and every element set forth in the claim must be found in the reference. MPEP 2131. Since Owens does not teach or

even suggest each and every aspect of the invention as currently claimed, the present claims are not anticipated by Owens. Thus, applicants respectfully traverse the Office's rejection under § 102(b).

The Office has further rejected claim 18 under 35 U.S.C. § 102(e) as being anticipated by US 5,770,110 (Schrell). More specifically, the Office asserts that Schrell teaches a process of making a luminescent fiber as claimed.

Applicants do not concede that the Schrell patent is prior art to the invention as now claimed and specifically reserve the right to swear behind this patent. However, applicants assert that the claimed invention is nevertheless patentably distinct over the disclosure of Schrell for the reasons indicated below.

As applicants have noted in the specification of the present application, DE-A-19 539 315 (the foreign application to which Schrell claims priority) teaches a process for producing a colorless regenerated cellulose fiber by mixing a fiber material with certain inorganic luminophors, wherein the luminophors have an average particle size of less than 1 micron.

In contrast to Schrell, the present claims are specifically directed to luminophors having an average particle size of from about 1 micron to about 30 microns. Applicants have discovered the use of luminophors of this size range produce superior lightfastness and luminescence intensity, particularly compared to the fibers made by Schrell process. Thus, Schrell not only fails to teach each and every aspect of the invention as currently claimed, it actually teaches away from the applicants' invention.

In view of the actual teachings of Schrell, the Office's rejection under § 102(e) is untenable. Applicants therefore respectfully traverse the Office's rejection under § 102(e).

Rejection Under 35 U.S.C. § 103(a):

The Office has rejected claim 19 under 35 U.S.C. § 103(a) as being obvious over Owens or Schrell.

With respect to Owens, the Office states the patent teaches the claimed process, except that it does not explicitly teach viscose as a fiber-forming material. However,

according to the Office, the application of viscose to the disclosure of Owens would have been obvious to one skilled in the art at the time of the invention.

Applicants respectfully disagree with the Office's conclusion because viscose and thermoplastic polymers are not related materials and there is no suggestion in Owens that any material other than thermoplastics may be practiced with the disclosed method.

The method of Owens is directed to fibers produced from thermoplastic polymers, such as nylon, polyester, or polypropylene. Although Owens states that the disclosed invention is not limited to the particular materials recited in the examples, it notes that other *thermoplastic* materials may likewise be utilized. (*See* col. 7, lines 50 – 57). There is no teaching or suggestion in Owens of any material other than thermoplastics that may be practiced with the disclosed method.

Unlike the solid thermoplastic polymers of Owens, which are generally petroleum-based, viscose is not generally synthetic but instead is derived from a cellulose-based solution. In addition, one skilled in the art would recognize that thermoplastics and viscose have very different physical and chemical properties, particularly with respect to their use as a fiber-forming materials. Thus, contrary to the Office's assertions, applicants contend that Owens neither teaches nor suggests the use of viscose as a fiber-forming material and that it would not have been obvious to one skilled in the art to apply viscose to the teachings of Owens. Moreover, the Office provides no support or rationale for its conclusion that it would have been obvious to apply viscose to the teachings of Owens, especially in view of the fact that Owens discloses thermoplastic polymers in pelletized or chipped form. (*See* col. 3, line 60 – col. 4, line 1.)

With respect to Schrell, applicants note that this reference, as pointed out above, does not teach or suggest all of the claim limitations of the present invention. According to MPEP 2142, “[t]o establish a prima facie case of obviousness, ... the prior art reference (or references when combined) must teach or suggest all of the claim limitations”. Clearly, Schrell does not teach the use of a luminophor pigment characterized in that it has an average particle size of from about 1 micron to about 30 microns. In fact, Schrell explicitly states that it is advantageous to use a pigment with a particle size of less than 1 micron. (*See* col. 2, lines 27 – 29).

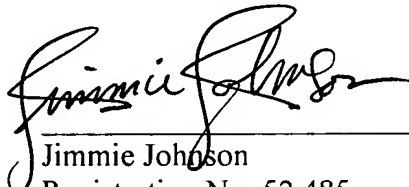
For at least these reasons, applicants respectfully request that the Office withdraw its rejections under § 103(a).

In view of the aforementioned claim amendment and the foregoing remarks, applicants assert that the present claims are in condition for allowance and request that the Office issue a Notice of Allowance at the earliest possible date. If any fees are required in order to further the prosecution of this application, applicants request that the Office charge such fees to Deposit Account No. 19-5425.

The Office is invited to contact the undersigned by telephone in order to further the prosecution of this application in any way.

Respectfully submitted,

Dated: 12/14/05



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